

EXHIBIT 1

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**IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION**

GOOGLE LLC,

Plaintiff,

v.

SONOS, INC.,

Defendant.

Case No. 3:20-cv-06754-WHA
Related to Case No. 3:21-cv-07559-WHA

**REBUTTAL EXPERT REPORT
REGARDING DAMAGES**

January 13, 2023

Respectfully Submitted,



W. Christopher Bakewell

including: **Section 7.1** (Sonos Agreements), **Section 7.2** (Sonos-Google Negotiations), **Section 7.3** (Google Patent Licenses), and **Section 7.4** (Google Patent Purchases). In **Section 7.5**, I address Mr. Malackowski's "alternative" theory for the '033 patent, which includes what he refers to as comparable, third-party apps.

483. Briefly, Mr. Malackowski stated that the Sonos agreements are not "probative of the outcome of the hypothetical negotiation in this case."⁸⁵⁰ Mr. Malackowski stated that the licensing negotiations between Sonos and Google are not comparable to the hypothetical licenses.⁸⁵¹ Mr. Malackowski also stated that the Google agreements are "not economically comparable to the license that would result from the hypothetical negotiation in this case..."⁸⁵² Nevertheless, Mr. Malackowski included a relatively extensive discussion of these agreements, and made flawed observations along the way, to which I provide rebuttal.
484. As I will discuss in **Section 7.4**, these apps relied upon by Mr. Malackowski are not specific to any patent rights, and Mr. Malackowski identified no patented technology in them.⁸⁵³ Some of the Google patent purchase agreements provide better benchmarks than the apps and other proxies that Mr. Malackowski utilized.⁸⁵⁴

7.1 Mr. Malackowski Mistreated Sonos Licensing Evidence

485. Mr. Malackowski and I appear to agree that the Sonos agreements are not comparable to the hypothetical license(s).⁸⁵⁵ Yet Mr. Malackowski includes a lengthy discussion about their

⁸⁵⁰ Malackowski Supplemental Report, pp. 45, 48, 50.

⁸⁵¹ Malackowski Supplemental Report, pp. 51-52.

⁸⁵² Malackowski Supplemental Report, pp. 53-58.

⁸⁵³ In fact, Mr. Malackowski stated that "like the prior art, these apps do not perform each and every limitation of the independent Asserted Claims of the '033 Patent." Malackowski Supplemental Report, pp. 66-68. Mr. Malackowski also cited to Dr. Schmidt's report that "these apps operate in a similar fashion to the prior art that Google has asserted against the '033 patent." Malackowski Supplemental Report, p. 68, citing Opening Schmidt Report, pp. 165 – 166. Thus, these apps, even according to Mr. Malackowski's, relate to prior art and not to the '033 patent. Georgia-Pacific Factor 9 discusses that the prior art should be separated out in a reasonable royalty determination. I further understand from Dr. Bhattacharjee that these are not good benchmarks for the '033 patent. Interview of Dr. Bhattacharjee.

⁸⁵⁴ Malackowski Supplemental Report, pp. 53-54, 66.

⁸⁵⁵ Malackowski Supplemental Report, pp. 45, 48, 50.

terms, so it is unclear if he intends to utilize them at all.⁸⁵⁶ Therefore, I respond to Mr. Malackowski below, addressing each agreement, doing so in chronological order.

Mr. Malackowski Mistreated The 2018 Sonos – Denon Agreement

486. Mr. Malackowski and I agree that the Denon agreement is “not comparable to the hypothetical license.”⁸⁵⁷ Effective May 17, 2018, Sonos and DEI Sales, Inc. (“DEI” or “Denon”) entered into a Confidential Patent Covenant Agreement (the “2018 Sonos – Denon Agreement”).⁸⁵⁸ Denon agreed to pay Sonos a one-time payment.⁸⁵⁹ Mr. Malackowski did not address the lump-sum form, despite in his review of other Sonos agreements commenting on the form of the royalties.⁸⁶⁰
487. This agreement involved the settlement of litigation. In October 2014, Sonos filed a complaint alleging that D&M’s “HEOS by Denon” system⁸⁶¹ infringed certain Sonos patents.⁸⁶² In

⁸⁵⁶ Malackowski Supplemental Report, pp. 45, 48, 50.

⁸⁵⁷ Malackowski Supplemental Report, p. 50. Mr. Malackowski states that he found the DEI agreement “to not be probative of the outcome of the hypothetical negotiation in this case, as the Sonos/Denon Agreement was entered as part of settlement of litigation which included covenants from both Sonos and Denon.” Malackowski Supplemental Report, p. 48.

⁸⁵⁸ SONOS-SVG2-00059384-404.

⁸⁵⁹ SONOS-SVG2-00059384-404, at 388; SONOS-SVG2-00059405. DEI agreed to pay Sonos the \$10 million payment as follows: (i) \$2.5 million within seven days of the effective date; (ii) \$3 million within 128 days of the effective date; (iii) \$3 million within 188 days of the effective date, and (iv) \$1.5 million within 233 days of the effective date. *See* SONOS-SVG2-00059384-404, at 388.

⁸⁶⁰ For example, Mr. Malackowski claims that the Lenbrook agreement is a “per-unit” royalty structure that is “indicative of Sonos’s past licensing history,” despite being “part of a settlement of litigation.” Malackowski Supplemental Report, p. 48.

⁸⁶¹ “The HEOS system” is a wireless audio system made up of a line of HEOS wireless audio products, including the “HEOS 7” speaker, “HEOS 5” speaker, the “HEOS 3” speaker, the “HEOS LINK” pre-amplifier, and the “HEOS AMP” amplifier, all of which are controlled by the HEOS app,

⁸⁶² SONOS-SVG2-00059384-404, at 384-386 and 394; Complaint for Patent Infringement, *Sonos, Inc. v. D&M Holdings Inc. d/b/a The D+M Group, D&M Holdings U.S. Inc., and Denon Electronics (USA), LLC*, Case No. 1:14-cv-1330, October 21, 2014, pp. 4-19; Second Supplement to Third Amended Complaint for Patent Infringement, *Sonos, Inc. v. D&M Holdings Inc. d/b/a The D+M Group, D&M Holdings U.S. Inc., and Denon Electronics (USA), LLC*, Case No. 1:14-cv-1330, September 28, 2017, pp. 8-44. I understand that Sonos asserted the following patents against DEI: USP 7,571,014, 7,792,311, 7,805,682, 8,024,055, 8,370,678, 8,588,949, 8,689,036, 8,788,080, 8,843,224, 8,923,997, 8,938,312, 8,938,637, 9,042,556, 9,130,771, 9,195,258, 9,202,509, 9,213,357, 9,219,959, and D559,197.” *See* SONOS-SVG2-00059384-404, at 384-385; Complaint for Patent Infringement, *Sonos, Inc. v. D&M Holdings Inc. d/b/a The D+M Group, D&M Holdings U.S. Inc., and Denon Electronics (USA), LLC*, Case No. 1:14-cv-1330, October 21, 2014, pp. 4-19; Second Supplement to Third Amended Complaint for Patent Infringement, *Sonos, Inc. v. D&M Holdings Inc. d/b/a The D+M Group, D&M Holdings U.S. Inc., and Denon Electronics (USA), LLC*, Case No. 1:14-cv-1330, September 28, 2017, pp. 8-44. However, the patents-in-suit in this case were not asserted in the litigation brought by Sonos against DEI. SONOS-SVG2-00059384-404, at 384-386 and 394; Complaint for Patent Infringement, *Sonos, Inc. v. D&M*

March 2016, Denon filed a counterclaim against Sonos.⁸⁶³ Under the 2018 Sonos – Denon Agreement, Sonos and Denon agreed to dismiss the litigations between them, including the two aforementioned patent litigations (*i.e.*, Case Nos. 1:14-cv-1330 and 1:16-cv-141) and Patent Trial and Appeal Board (“PTAB”) (Review No. IPR2017-01045).⁸⁶⁴ I note that Mr. Malackowski disregarded the lump-sum form of royalty in this agreement. He did so even though the 2020 Sonos - Lenbrook Agreement (discussed immediately below) also settled litigation, and for that agreement, Mr. Malackowski observed that it had a “per-unit royalty structure [that] is indicative of Sonos’s past licensing history.”⁸⁶⁵

Mr. Malackowski Mistreated The 2020 Sonos – Lenbrook Agreement

488. Mr. Malackowski and I agree that the 2020 Sonos - Lenbrook Agreement is “not probative of the outcome of the hypothetical negotiation;” we also agree it was entered into as “part of settlement of litigation.”⁸⁶⁶ Nevertheless, Mr. Malackowski stated that the “per unit royalty structure” is “indicative of Sonos’s past licensing history.”⁸⁶⁷ Since Mr. Malackowski provided a discussion of the terms of this agreement, I provide some discussion below for rebuttal purposes.

489. Effective January 1, 2020, Sonos and Lenbrook Industries Limited (“Lenbrook”) entered into a cross-license agreement in settlement of litigation where both parties granted a license to

Holdings Inc. d/b/a The D+M Group, D&M Holdings U.S. Inc., and Denon Electronics (USA), LLC, Case No. 1:14-cv-1330, October 21, 2014, pp. 4-19; Second Supplement to Third Amended Complaint for Patent Infringement, *Sonos, Inc. v. D&M Holdings Inc. d/b/a The D+M Group, D&M Holdings U.S. Inc., and Denon Electronics (USA), LLC*, Case No. 1:14-cv-1330, September 28, 2017, pp. 8-44.

⁸⁶³ SONOS-SVG2-00059384-404, at 384-386 and 394; Counterclaim, *D&M Holdings, Inc., et al. v. Sonos, Inc.*, Case No. 1:16-cv-141, March 7, 2016 (accessed: https://ecf.ded.uscourts.gov/cgi-bin/HistDocQry.pl?147297999057502-L_1_0-1). According to the amended complaint, DEI alleged that Sonos’s wireless home audio system (“Accused Home Audio System”), including Sonos’ line of “PLAY” speakers (*e.g.*, “PLAY:1,” “PLAY:3,” and “PLAY:5” speakers, the “SUB” speaker and the “PLAYBAR” speaker (the “Sonos Speaker Products”), infringed certain DEI patents. SONOS-SVG2-00059384-404, at 384-386 and 394; Plaintiffs’ Amended Complaint for Patent Infringement, *D&M Holdings Inc. d/b/a The D+M Group, D&M Holdings U.S. Inc. v. Sonos, Inc.*, Case No. 1:16-cv-141, May 1, 2017, pp. 5-25. I understand that DEI asserted the following patents against Sonos: USP 7,734,850, 6,539,210, 6,469,633, 8,755,667, 6,473,441, 7,987,294, 7,343,435, 7,305,694 and 7,995,899. See SONOS-SVG2-00059384-404, at 384-385; Plaintiffs’ Amended Complaint for Patent Infringement, *D&M Holdings Inc. d/b/a The D+M Group, D&M Holdings U.S. Inc. v. Sonos, Inc.*, Case No. 1:16-cv-141, May 1, 2017, pp. 5-25.

⁸⁶⁴ SONOS-SVG2-00059384-404, at 394.

⁸⁶⁵ Malackowski Supplemental Report, p. 48.

⁸⁶⁶ Malackowski Supplemental Report, p. 48.

⁸⁶⁷ Malackowski Supplemental Report, p. 48.

each other's worldwide patent portfolio.⁸⁶⁸ The technical and economic circumstances of this agreement differ from the hypothetical license, as it included cross-licensing terms, relatively early settlement of litigation, and rights to each other's worldwide patent portfolios.⁸⁶⁹ Also, the business models of Lenbrook and Google are not comparable to Google and the accused products.⁸⁷⁰

490. Mr. Malackowski claimed he does not "use the royalty rate amount, rather only the structure, to inform [his] opinion."⁸⁷¹ Mr. Malackowski claimed that "the stage of settlement and discount would generally affect the royalty rate only, not the structure."⁸⁷² However, the matter settled prior to claim construction hearing or prior to any expert report filings, dispositive motions, or trial.⁸⁷³ Mr. Malackowski disregarded that the total amount of the payment indicates that this license could have been entered into by Lenbrook to avoid the costs of litigating the case.⁸⁷⁴ If so, it is possible that the overall objective of Lenbrook would reasonably have been to avoid the cost of litigation. This discredits Mr. Malackowski's claim that the "per unit royalty structure is indicative of Sonos's past licensing history."⁸⁷⁵

⁸⁶⁸ SONOS-SVG2-00042923-944.

⁸⁶⁹ SONOS-SVG2-00042923-944.

⁸⁷⁰ Lenbrook agreed to pay Sonos an initial payment equal to the 2019 royalties due (*i.e.*, approximately \$400,000) and royalty payments ranging between \$3.60 per unit and \$30.00 per unit depending on the volume, classification, and territory or approximately \$1.3 million from January 1, 2020 to September 30, 2021. SONOS-SVG2-00042923-944 at 9026-929. Mr. Malackowski and I agree that this agreement is a cross license. Malackowski Supplemental Report, pp. 46-48. However, Mr. Malackowski did not evaluate the balancing payment, or the balance of total payments, including identifying any royalty rates specific to patent rights comparable to the hypothetical license(s). The royalty rates that Mr. Malackowski discusses associated with this agreement are not relevant to the hypothetical license, nor are any of its other terms. Malackowski Supplemental Report, pp. 46-48. Based on royalty reports produced by Sonos,

⁸⁷¹ Malackowski Supplemental Report, p. 48.

⁸⁷² Malackowski Supplemental Report, p. 48.

⁸⁷³ In June 2019, Sonos filed a complaint alleging that Lenbrook's "Bluesound" system, a line of wireless audio products, including the "Bluesound Players" and/or one or more "BlueOS Controller Apps," infringed certain Sonos patents. However, the patents-in-suit in this case were not asserted in the litigation brought by Sonos against Lenbrook. Under the 2020 Sonos – Lenbrook Agreement, Sonos agreed to dismiss the litigation against Lenbrook. SONOS-SVG2-00042923-944, at 923-925 and 936; Complaint for Patent Infringement, *Sonos, Inc. v. Lenbrook Industries Limited and Lenbrook America Corp.*, Case No. 2:19-cv-5411, June 20, 2019, pp. 1-6 and 37-89. I understand that Sonos asserted the following patents against Lenbrook: USP 8,588,949; 8,868,698; 8,938,312; 9,195,258; 9,219,959; 9,252,721; and 9,883,234. See SONOS-SVG2-00042923-944, at 924; Complaint for Patent Infringement, *Sonos, Inc. v. Lenbrook Industries Limited and Lenbrook America Corp.*, Case No. 2:19-cv-5411, June 20, 2019, pp. 37-89.

⁸⁷⁴ AIPLA 2021 Report of the Economic Survey, p. 60. Lenbrook paid Sonos royalties totaling approximately \$1.7 million on worldwide sales from January 1, 2019 through September 30, 2021, of which U.S. royalty payments totaled approximately \$800,000 during the same timeframe (*see Exhibit 7.0*). SONOS-SVG2-00042923-944, at 926-929.

⁸⁷⁵ Malackowski Supplemental Report, pp. 46-48.

491. Mr. Malackowski also claimed that Lenbrook contested the validity and infringement of Sonos's patents, and that the royalty was "likely discounted based on the risk of a judgment of invalidity or non-infringement of Sonos's patents."⁸⁷⁶ Mr. Malackowski did not quantify or specifically identify the economic basis for the supposed "discount," or if it affected the terms of payment.⁸⁷⁷

Mr. Malackowski Mistreated The 2020 Sonos – Legrand Agreement

492. Effective December 1, 2020, Sonos and Pass & Seymour, Inc. ("Legrand") entered into a Confidential Patent License Agreement.⁸⁷⁸ Mr. Malackowski agrees with me that this agreement is "not comparable to the hypothetical license."⁸⁷⁹ Nevertheless, he provides an extensive discussion of it, including its economic terms, which I discuss below in rebuttal.

493. Mr. Malackowski stated that while the 2020 Sonos – Legrand Agreement included a grant to Sonos's entire portfolio," the per-unit royalty rates could represent a "maximum ceiling for the value of the Direct Control and Zone Scene Technology."⁸⁸⁰ Mr. Malackowski admitted that the 2020 Sonos – Legrand Agreement included a "grant to Sonos's entire patent portfolio," and Mr. Malackowski did not isolate a value specific to any of the patents-in-suit. Mr. Malackowski provided no reasonable basis to claim that the rates set forth are at all relevant to the hypothetical license(s).

⁸⁷⁶ Malackowski Supplemental Report, p. 48.

⁸⁷⁷ Mr. Malackowski states that "the per-unit royalty rates could represent a maximum as to the value of the royalty rate," and that I previously provided "no analysis" to support claims that this is inconsistent with his claim that he did not provide any weight to this agreement. Mr. Malackowski states that he "understands" that "on balance, Sonos's extensive patent portfolio included in this license would likely outweigh the arguments Mr. Bakewell advances." Malackowski Supplemental Report, p. 44. But it is Mr. Malackowski who said this license is not informative, but then later says that the royalty rates have some relevance.

⁸⁷⁸ SONOS-SVG2-00042905-922. The royalty rates ranged between \$3.60 per unit to \$30.00 per unit⁸⁷⁸ depending on the volume and territory or approximately \$70,000 from October 1, 2020 to September 30, 2021. SONOS-SVG2-00042905-922, at 910 and 913. In addition, Legrand agreed to pay Sonos an initial payment of approximately \$200,000. SONOS-SVG2-00042905-922, at 910 and 913.

⁸⁷⁹ Malackowski Supplemental Report, p. 45.

⁸⁸⁰ Malackowski Supplemental Report, p. 44.

494. Mr. Malackowski stated that “Legrand only paid roughly \$200,000 in royalties because, according to Legrand, it was getting out of the market.”⁸⁸¹ Mr. Malackowski does not recognize that this means the form of the royalties may have lacked economic substance, as Legrand would not have any interest in the form of the payment, only that it would be able to leave with minimal costs.⁸⁸²
495. Similar considerations apply to Mr. Malackowski’s statements about a “maximum ceiling.” Here, Mr. Malackowski also disregarded the importance of the scope. Sonos granted Legrand a non-exclusive, non-transferable, non-sublicensable, personal, and worldwide license to its entire patent portfolio to sell Covered Products during the term.⁸⁸³ This is broader than the hypothetical license(s), and Mr. Malackowski makes no adjustment or reconciliation. Legrand also covenanted not to sue Sonos for patent infringement under the Licensee Patents for Sonos’ worldwide sales of Covered Products during the term.⁸⁸⁴ The parties agreed to release each other from any and all claims of infringement related the Licensed Patents as of the effective

⁸⁸¹ Malackowski Supplemental Report, p. 35 and footnote 193. SONOS-SVG2-00042905-922, at 913. In the event of an extension after September 30, 2024, any sales made by Legrand of Covered Products beginning on October 1, 2024 and through the date an agreement to an Extended Term is made and executed would be considered as licensed and Legrand shall pay Sonos applicable royalties for interim sales in accordance with the terms of the agreement. The term of the agreement commenced on the effective date and extended through September 30, 2024, subject to an extension based on good faith negotiations by Sonos and Legrand.

⁸⁸² Based on royalty reports produced by Sonos, Legrand paid approximately \$278,000 in worldwide royalties, of which approximately \$239,000 were U.S. royalties, during the period from January 2019 through September 30, 2021 (see **Exhibit 7.1**). Legrand agreed to pay Sonos a minimum royalty of \$35,000 for the annual period of October 1, 2020 through September 30, 2021; \$20,000 for the annual period of October 1, 2021 through September 30, 2022; \$7,500 for the annual period October 1, 2022 through September 30, 2023; and \$2,500 for the annual period of October 1, 2023 through September 30, 2024. See SONOS- SONOS-SVG2-00042905-922, at 911.

⁸⁸³ The term “Licensed Patents” was defined as “all utility Patents owned or controlled by Sonos at any time during the Term but excluding any of the Sonos Patent portfolio related to concurrent voice technology (i.e., patents directed to concurrently operating multiple voice services on a single product, offering, or device (‘Excluded Patents’).” See SONOS- SONOS-SVG2-00042905-922, at 906. See SONOS-SVG2-00042905-922, at 906-907. The term “Covered Products” was defined as: “1. For [Legrand], all multi-room wireless audio products listed in Exhibit B that are [s]old by [Legrand], during the Term and for which an appropriate Royalty would be payable to Sonos pursuant to Section 4; and 2. For Sonos, all software, products and services of Sonos that are [s]old by Sonos during the Term[;] provided, however Covered Products do not include (1) Foundry Products, (2) Acquired Products, (3) Stand-Alone Software or (4) Cone Products.” See SONOS-SVG2-00042905-922, at 905-906. See SONOS-SVG2-00042905-922, at 907-908.

⁸⁸⁴ The term “Licensee Patents” was defined as “any utility Patents owned or controlled by [Legrand] and or its Affiliates at any time during the Term which are related to multi-room wireless audio products and/or smart speakers.” See SONOS-SVG2-00042905-922, at 907-908.

date.⁸⁸⁵ There is no indication of an amount that is specific to the patent rights and associated payments in the hypothetical license(s).

496. Mr. Malackowski also did not perform comparative analysis of the business models of Legrand and Google, nor did he compare their products. Legrand is a diversified company specializing in “electrical and digital building infrastructure.”⁸⁸⁶ Legrand sells power management systems, speakers, subwoofers, home theater connections and cable management, audio video cables, multi-room audio products, home automation products, cameras, and “intercom, video and voice products,” among other products.⁸⁸⁷ These products are different than Google’s.⁸⁸⁸
497. The “Covered Products” in the 2020 Sonos – Legrand Agreement are also different from Google’s accused products. “Covered Products” was defined to include certain of Legrand’s “multi-room wireless audio products,” which included several Legrand’s “Nuvo” branded speaker products.⁸⁸⁹ In 2021, Legrand discontinued its Nuvo-branded products, including speakers.⁸⁹⁰
498. In summary, the 2020 Sonos – Legrand Agreement is not comparable to the hypothetical license(s), either in terms of form or amount, or as a “maximum,” as Mr. Malackowski suggests.⁸⁹¹

⁸⁸⁵ SONOS-SVG2-00042905-922, at 907-908.

⁸⁸⁶ “About Legrand” (accessed: <https://www.legrand.us/about-us>).

⁸⁸⁷ “About Legrand” (accessed: <https://www.legrand.us/about-us>).

⁸⁸⁸ *See, e.g.*, “Google Nest Smart Speakers: A Cheat Sheet,” TechRepublic, October 8, 2020 (accessed: <https://www.techrepublic.com/article/google-nest-smart-speakers-a-cheat-sheet/>); “Google Nest Audio: Everything You Need To Know About The Smart Speaker,” Android Authority, February 5, 2022 (accessed: <https://www.androidauthority.com/google-nest-audio-1161563/>).

⁸⁸⁹ SONOS-SVG2-00042905, at 905-906, 921.

⁸⁹⁰ “Your Questions, Answered” Legrand website (accessed: <https://www.legrand.us/nuvo/update>).

⁸⁹¹ According to Mr. Malackowski, I stated “that this agreement is not relevant to the hypothetical negotiations, either in terms of form or amount, particularly as a ‘maximum’ because it is wider in scope geographically (i.e., worldwide) and legally (i.e., including release, covenant not to sue, etc.).” Mr. Malackowski also stated that “he understand[s] that, on balance, Sonos’s extensive patent portfolio included in this license would likely outweigh the arguments Mr. Bakewell advances.” Malackowski Supplemental Report, p. 45. It is unclear why, if Mr. Malackowski intends to opine that this agreement is not comparable to the hypothetical license(s), he would offer such inconsistent commentary. It is also unclear what Mr. Malackowski means by saying he has an understanding, instead of an observation of his own.